Claims

1. A caster-and-sleeve assembly for use in a system for supporting a platform-like object on posts, in which at least one of the posts includes a post end with a central aperture therein, the caster-and-sleeve assembly comprising:

a caster including a wheel and an elongated stem attached to the wheel, the stem configured for being inserted into a central aperture of a post end of a post for attaching the caster to the post, and

a post-supporting sleeve configured to slidably couple a post to a caster, the post-supporting sleeve including an inside diameter greater than an outside diameter of a post end, the post-supporting sleeve including a first end, a second end, and an end piece coupled to the second end, the end piece having a central opening therein, the diameter of the central opening being not less than the diameter of a central aperture of a post end, such that, when a post is inserted into the first end of the post-supporting sleeve so that the post end of the post contacts the end piece, and such that, when the elongated stem of a caster is inserted through the central opening in the end piece of the post-supporting sleeve and through a central aperture of a post end of a post so inserted into the post-supporting sleeve, the post-supporting sleeve supports the post end and inhibits deformation of the post end in a radially outward direction from the longitudinal axis of the post.

2. The system of claim 1, further comprising:

a tapered supporting sleeve configured to be coupled to the first end of the post-supporting sleeve and to frictionably couple a collar of the platform-like object to a post and a caster, the tapered supporting sleeve including an inside diameter greater than the outside diameter of a post end, the

tapered supporting sleeve including a tapered outside diameter, the tapered supporting sleeve configured to be coaxially coupled to the post-supporting sleeve such that the outside diameter of the tapered supporting sleeve decreases from the junction of the tapered supporting sleeve with the post-supporting sleeve in a direction that extends from a caster to an attached post in an assembled caster-and-post junction, and such that, when a collar of a platform-like object is assembled onto and around the tapered supporting sleeve and a post inserted into the tapered supporting sleeve and the post-supporting sleeve, the tapered supporting sleeve frictionably receives the collar.

3. The system of claim 1, wherein the stem includes a bolt, a post includes a post end having a central aperture and threads surrounding the central aperture, and the bolt threads of the bolt are mated to the internal threads of a post end, such that, when a bolt is inserted through the central opening in the end piece of a post-supporting sleeve and screwed into the internal threads of a post end of a post inserted into the post-supporting sleeve, the post-supporting sleeve supports the post end and inhibits deformation of the post end in a radially outward direction from the longitudinal axis of the post.

4. A sleeve assembly for use in a system for supporting a platform-like object on posts and casters attached to the posts, in which at least one of the posts includes a post end with a central aperture therein, and in which at least one of the casters includes a wheel and an elongated stem attached to the wheel, the stem configured for being inserted into the central aperture of a post end of a post and for attaching the caster to the post, the sleeve assembly comprising:

a post-supporting sleeve configured to slidably couple a post to a caster, the post-supporting sleeve including an inside diameter greater than an outside diameter of a post end, the post-supporting sleeve including a first end, a second end, and an end piece coupled to the second end, the end piece having a central opening therein, the diameter of the central opening being not less than the diameter of a central aperture of a post end, such that, when a post is inserted into the first end of the post-supporting sleeve so that the post end of the post contacts the end piece, and such that, when the elongated stem of a caster is inserted through the central opening in the end piece of the post-supporting sleeve and through a central aperture of a post end of a post so inserted into the post-supporting sleeve, the post-supporting sleeve supports the post end and inhibits deformation of the post end in a radially outward direction from the longitudinal axis of the post, and

a tapered supporting sleeve configured to be coupled to the first end of the post-supporting sleeve and to frictionably couple a collar of a platform-like object to a post and a caster, the tapered supporting sleeve including an inside diameter greater than the outside diameter of a post end, the tapered supporting sleeve including a tapered outside diameter, the tapered supporting sleeve configured to be coaxially coupled to the post-supporting sleeve such that such that the outside diameter of the tapered supporting sleeve decreases from the junction of the tapered supporting sleeve with the post-supporting sleeve in a direction that extends from a caster to an attached post in an assembled caster-and-post junction, and such that, when a collar of a platform-like object is assembled onto and around the tapered supporting sleeve and a post inserted into the tapered supporting sleeve and the post-

supporting sleeve, the tapered supporting sleeve frictionably receives the collar.

5. The assembly of claim 4, wherein the outer shape of the post-supporting sleeve includes one of: substantially cylindrical, substantially oval, substantially semi-oval, and substantially polygonal, and wherein a central portion of the post-supporting sleeve includes a substantially cylindrical shape having an inside diameter greater than an outside diameter of a post end.

6. The assembly of claim 4, wherein the post-supporting sleeve and the end piece are attached to each other by one of an adhesive, a braise, a fastener, threads, a press-fit, and a weld.

7. The assembly of claim 4, wherein the post-supporting sleeve and the end piece are integrally constructed.

8. The assembly of claim 4, wherein the tapered supporting sleeve and the post-supporting sleeve are attached to each other by one of an adhesive, a braise, a fastener, threads, a press-fit, and a weld.

9. The assembly of claim 4, wherein the tapered supporting sleeve and the post-supporting sleeve are integrally constructed.

10. The assembly of claim 4, wherein at least one of the post-supporting sleeve and the tapered supporting sleeve is constructed from at least one of: a plastic and a metal.

11. The assembly of claim 4, wherein the post-supporting sleeve and the tapered supporting sleeve are integrally constructed from one of steel and reinforced plastic.

12. The assembly of claim 4, wherein, when the tapered supporting sleeve is coupled to the post-supporting sleeve, the intersection forms a lip sized and shaped such that, when a collar of a platform-like object is assembled onto and around the tapered supporting sleeve and a post inserted into the tapered supporting sleeve and the post-supporting sleeve, the lip supports an end of the collar.

13. The assembly of claim 4, wherein the tapered outside diameter of the tapered supporting sleeve includes a taper ranging from approximately 3 to approximately 5 degrees with measured respect to the axis of the tapered supporting sleeve.

14. The assembly of claim 4, wherein a stem of a caster includes a bolt, a post end of a post includes threads surrounding the central aperture in the post end, and the bolt threads of a bolt are mated to the internal threads of a post end, such that, when the bolt is inserted through the central opening in the end piece of the post-supporting sleeve and screwed into the internal threads of a post end of a post inserted into the post-supporting sleeve, the post-supporting sleeve supports the post end and inhibits deformation of the post end in a radially outward direction from the longitudinal axis of the post.

15. The assembly of claim 14, wherein a post includes an insert that has a threaded central aperture and that is press-fit into a post end.

16. A post-supporting sleeve for use in a system for supporting a platform-like object on posts and casters attached to the posts, in which at least one of the posts includes a post end with a central aperture therein, and in which at least one of the casters includes a wheel and an elongated stem attached to the wheel, the stem configured for being inserted into the central aperture of a post end of a post for attaching the caster to the post, the outer diameter of the stem being not less than the diameter of the central aperture, the post-supporting sleeve comprising:

a post-supporting sleeve configured to slidably couple a post to a caster, the post-supporting sleeve including an inside diameter greater than an outside diameter of a post end, the post-supporting sleeve including a first end, a second end, and an end piece coupled to the second end, the end piece having a central opening therein, the diameter of the central opening being not less than the diameter of a central aperture of a post end, such that, when a post is inserted into the first end of the post-supporting sleeve so that the post end of the post contacts the end piece, and such that, when the elongated stem of a caster is inserted through the central opening in the end piece of the post-supporting sleeve and through a central aperture of a post end of a post so inserted into the post-supporting sleeve, the post-supporting sleeve supports the post end and inhibits deformation of the post end in a radially outward direction from the longitudinal axis of the post.

17. The post-supporting sleeve of claim 16, wherein a stem of a caster includes a bolt, a post end of a post includes threads surrounding the central aperture in the post end, and the bolt threads of a bolt are mated to the internal threads of a post end, such that, when a bolt is inserted through the central

opening in the end piece of the post-supporting sleeve and screwed into the internal threads of a post end of a post inserted into the post-supporting sleeve, the post-supporting sleeve supports the post end and inhibits deformation of the post end in a radially outward direction from the axis of the bolt.

18. A method for supporting a platform-like object, the method comprising:

providing posts for supporting the object, each post including a post end with a central aperture therein,

providing casters, each caster including a wheel and an elongated stem attached to the wheel, the stem configured for being inserted into a central aperture of a post end of a post for attaching the caster to the post,

providing post-supporting sleeves, each post-supporting sleeve configured to slidably couple a post to a caster, the post-supporting sleeve including an inside diameter greater than an outside diameter of a post end, the post-supporting sleeve including a first end, a second end, and an end piece coupled to the second end, the end piece having a central opening therein, the diameter of the central opening being not less than the diameter of a central aperture of a post end, such that, when a post is inserted into the first end of the post-supporting sleeve so that the post end of the post contacts the end piece, and such that, when the elongated stem of a caster is inserted through the central opening in the end piece of the post-supporting sleeve and through a central aperture of a post end of a post inserted into the post-supporting sleeve, the post-supporting sleeve supports the post end and inhibits deformation of the post end in a radially outward direction from the longitudinal axis of the post,

mounting the object on the posts,

inserting the post ends into the first ends of the post-supporting sleeves, such that the post ends contact the end pieces, and

inserting the stems through the central openings in the post-supporting sleeves and through the central apertures in the end pieces of the post ends disposed in the post-supporting sleeves, thereby attaching the casters to the posts.

19. The method of claim 18, wherein mounting the object on the posts includes:

inserting the posts through collars of the object.

20. The method of claim 18, further comprising:

providing tapered supporting sleeves, each tapered supporting sleeve configured to be coupled to the first end of a post-supporting sleeve and to frictionably couple a collar of the object to a post to a caster, the tapered supporting sleeve including an inside diameter greater than the outside diameter of a post end, the tapered supporting sleeve including a tapered outside diameter, the tapered supporting sleeve configured to be coaxially coupled to a post-supporting sleeve such that the outside diameter of the tapered supporting sleeve decreases from the junction of the tapered supporting sleeve with the post-supporting sleeve in a direction that extends from a caster to an attached post in an assembled caster-and-post junction, the tapered supporting sleeve and the post-supporting sleeve forming a lip in their region of intersection when coupled to each other, such that, when a collar is assembled onto and around the tapered supporting sleeve and a post inserted into the tapered supporting sleeve and the post-supporting sleeve, the tapered

supporting sleeve frictionably receives the collar and the lip supports an end of the collar, and

wherein mounting the object on the posts further includes disposing the collars of the object so as to rest on the supporting lips of the tapered supporting sleeves.